DEFENSE INFORMATION SYSTEMS AGENCY
P. O. BOX 549
FORT MEADE, MARYLAND 20755-0549

IN REPLY REFER TO: Joint Interoperability Test Command (JTE) **29 Sep 15**

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Joint Interoperability Certification of the Polycom Real Presence Collaboration Server Family Software Release 8.1.4.J with the Distributed Media Application (DMA) 7000 Software Release 6.0.1J

References: (a) Department of Defense Instruction 8100.04, "DoD Unified Capabilities (UC)," 9 December 2010
(b) Office of the Department of Defense Chief Information Officer, "Department of Defense Unified Capabilities Requirements 2013, Errata 1," 1 July 2013
(c) through (e), see Enclosure

Certification Authority. Reference (a) establishes the Joint Interoperability Test Command (JITC) as the Joint Interoperability Certification Authority for UC products.

Conditions of Certification. The Polycom Real Presence Collaboration Server Family Software Release 8.1.4.J with the DMA 7000 Software Release 6.0.1J; hereinafter referred to as the System Under Test (SUT), meets the critical requirements of the Unified Capabilities Requirements (UCR), Reference (b), and is certified for joint use on the Defense Information Systems Network (DISN) as a Video Only (VO) Unified Capabilities Conference System (UCCS) with the conditions described in Table 1.

The SUT was tested and certified for use with Assured Services Session Initiation Protocol (AS-SIP) interface when configured on the line side of the REDCOM High Density Exchange (HDX) and SLICE Local Session Controllers (LSCs).

Additionally, the SUT was tested and is certified with its Internet Protocol (IP) interface using the International Telecommunication Union (ITU) H.323 protocol. The SUT ITU H.323 interface is certified for use with any Video Teleconference (VTC) or Multipoint Control Unit (MCU) that is or was previously on the UC Approved Products List (APL).

The SUT was tested and certified with its Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI) Digital Transmission Link Level 1 (T1)/European Basic Multiplex Rate (E1) ITU H.320 interfaces. The SUT ITU H.320 interfaces are certified for use with any legacy Multifunction Switch (MFS), End Office (EO), Small End Office (SMEO), Private Branch Exchange (PBX) 1, PBX 2, or Deployable PBX that is or was previously on the UC APL certified with a T1 ISDN PRI or E1 ISDN PRI interface.

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the Polycom Real Presence Collaboration Server Family Software Release 8.1.4.J with the Distributed Media Application (DMA) 7000 Software Release 6.0.1J

In addition, the SUT ITU H.320 interfaces are certified for use with any LSC or Soft Switch (SS) Media Gateway that is or was previously on the UC APL certified with a T1 ISDN PRI or E1 ISDN PRI. This certification expires upon changes that affect interoperability, but no later than 6 February 2017, which is three years from the date of the original memorandum.

Table 1. Conditions

Condition	Operational Impact	Remarks
UCR Waivers		
None.		
Conditions of Fielding		
The MTU size on the DMA appliance is hard set to 1500 and is not configurable. DISA adjudicated this as minor with the Condition of Fielding that the SUT is certified for use in networks that do not include encryption.	Minor	
Open Test Discrepancies		
The SUT does not provide a banner for each conference; however, a conference banner is displayed in the gathering area prior to conference start.	None	See note 1.
The SUT does not support H.243 chair control standards.	None	See note 1.
The SUT does not support H.261 Annex D.	None	See note 1.
The SUT partially complies with mute audio/video requirements. The vendor is only able to mute/unmute audio.	None	See note 1.
The SUT does not provide a registration system.	None	See note 1.
The SUT does not provide a scheduling system.	None	See note 1.
The SUT does not provide an accounting and billing system. DISA adjudicated this as minor.	Minor	
During the original test, the SUT experienced only one way audio between the SUT and audio add-on End Instruments when the call was placed on hold then off hold. This discrepancy was fixed and successfully tested with DTR 3, which included Release 8.4.2.	None	Closed
During the original test, the SUT was not tagging the media packets in accordance with the UCR requirements. The SUT supported IPv4 and IPv6 DSCP tagging; however, the SUT did not have the ability to assign a distinct DSCP value for each of the 5 precedence levels. During testing for DTR 3, the vendor demonstrated a configuration change in the SUT to fix this discrepancy. To assign a unique DSCP value for each of the 5 different precedence levels, you must go to Setup > Precedence Settings and assign in a table DSCP values for each precedence level. Testers verified with Wireshark captures that each precedence level was correctly assigned a unique DSCP value.	None	Closed
The SUT does not support the use of H.263-2000. DISA adjudicated this as minor and stated the intent to change this requirement to reflect H.263 vice H.263-2000 as the required video compression protocol.	None	See note 1.
The SUT does not support the Online Directory requirement.	None	See note 1.
The SUT does not properly support Point-to-Point and Multipoint conferencing when calling Vidyo endpoints.	Minor	See note 2.

NOTES:
1. DISA adjudicated this as minor and stated the intent to change this requirement to optional.
2. DISA has accepted the vendor's POA&M and adjudicated this as minor.

LEGEND:

DISA	Defense Information Systems Agency	IPv6	Internet Protocol version 6
DMA	Distributed Media Application	MTU	Maximum Transmission Unit
DSCP	Differentiated Services Code Point	POA&M	Plan of Action and Milestones
DTR	Desktop Review	SUT	System Under Test
IPv4	Internet Protocol version 4	UCR	Unified Capabilities Requirements

Interoperability Status. Table 2 provides the SUT interface interoperability status and Table 3 provides the Capability Requirements (CR) and Functional Requirements (FR) status. Table 4 provides a UC APL product summary.

Table 2. SUT Interface Status

Interface (Protocol)	Threshold CR/FR Requirements (See note 1.)	Status	Remarks
Interfaces			
Ethernet 10 Mbps (AS-SIP) (R) (See note 2.)	1	Certified	
Ethernet 100 Mbps (AS-SIP) (R) (See note 2.)	1	Certified	
Ethernet 1000 Mbps (AS-SIP) (R) (See note 2.)	1	Certified	
Ethernet 10 Mbps (H.323) (C) (See note 2.)	1	Certified	
Ethernet 100 Mbps (H.323) (C) (See note 2.)	1	Certified	
Ethernet 1000 Mbps (H.323) (C) (See note 2.)	1	Certified	
T1 ISDN PRI (H.320) (C) (See note 3.)	1	Certified	
E1 ISDN PRI (H.320) (C) (See note 3.)	1	Certified	

NOTES:
1. The UCR does not identify interface CR/FR applicability. The SUT high-level CR and FR ID numbers depicted in the Threshold CRs/FRs column are cross-referenced with Table 3.
2. The UCR states that an Ethernet interface is required; however, it does not stipulate a specific rate. The SUT supports AS-SIP natively as well as H.323 through the SUT Ethernet interfaces.
3. The SUT supports H.320 PRI T1/E1 interface through the integrated H.320 PRI T1/E1 module.

LEGEND:

AS-SIP	Assured Services Session Initiation Protocol	Mbps	Megabits per second
C	Conditional	PRI	Primary Rate Interface
CR	Capability Requirement	R	Required
E1	European Basic Multiplex Rate (2.048 Mbps)	SUT	System Under Test
FR	Functional Requirement	T1	Digital Transmission Link Level 1 (1.544 Mbps)
ID	Identification	UCR	Unified Capabilities Requirements
ISDN	Integrated Services Digital Network		

Table 3. SUT Capability Requirements and Functional Requirements Status

CR/FR ID	UCR Requirement (High-Level) (See note 1.)	UCR 2013 Reference	Status
1	UC Audio and Video Conference System (R)	3.4	(See notes 2 and 3.)

NOTES:
1. The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (c), Enclosure 3.
2. Security testing is accomplished by DISA-led Information Assurance test teams and the results published in a separate report, Reference (e).
3. The SUT met the requirements for a Video Only (VO) Unified Capabilities Conferencing System (UCCS) with the exceptions noted in Table 1. DISA adjudicated these exceptions as minor.

LEGEND:

CR	Capability Requirement	R	Required
DISA	Defense Information Systems Agency	SUT	System Under Test
FR	Functional Requirement	UC	Unified Capabilities
ID	Identification	UCR	Unified Capabilities Requirements

Table 4. UC APL Product Summary

Product Identification			
Product Name	Polycom Real Presence Collaboration Server Family		
Software Release	8.6 (See note 2.)		
UC Product Type(s)	Unified Capabilities Conference System (UCCS) (Video Only)		
Product Description	Polycom Real Presence Collaboration Server family is a family of MCUs tested as Video Only UCCS with the optional Real Presence DMA as the server manager and Gatekeeper.		
Product Components (See note 1.)	**Component Name**	**Version**	**Remarks**
MCU	Real Presence Collaboration Server 1500	8.4.2.14140 (See note 2.)	
MCU	Real Presence Collaboration Server 1800	8.6 (See note 3.)	
MCU	Real Presence Collaboration Server 2000	8.6 (See notes 2 and 4.)	Includes MPMRx
MCU	Real Presence Collaboration Server 4000	8.6 (See notes 2 and 4.)	Includes MPMRx
MCU Manager / Gatekeeper	Real Presence DMA 7000	6.3 (See note 5.)	
Management Laptop (site-provided)	Sony Tough Book	Microsoft Windows 7 SP1	

NOTES:
1. The detailed component and subcomponent list is provided in Reference (c), Enclosure 3.
2. The SUT was updated from 8.1.4.J to 8.3.0J with DTR 2. The SUT was updated from 8.3.0J to 8.4.2 with DTR 3. The SUT was updated from 8.4.2 to 8.6 with DTR 4; however, the Collaboration Server 1500 does not support the 8.6 release.
3. The Real Presence Collaboration Server 1800 was included with DTR 4.
4. The MPMRx media blade was included in the Real Presence Collaboration Server 2000 and 4000 with DTR 4.
5. The Real Presence DMA 7000 was updated from 6.0.1J to 6.3 with DTR 4.

LEGEND:

APL	Approved Product List	MPMRx	Media blade module for RMX
DMA	Distributed Media Application	SP	Service Pack
DTR	Desktop Review	UC	Unified Capabilities
MCU	Multipoint Conferencing Unit	UCCS	Unified Capabilities Conference System

Test Details. The extension of this certification is based upon Desktop Review (DTR) 4. The original certification, documented in Reference (c), is based on interoperability testing, review of the vendor's Letters of Compliance (LoC), DISA adjudication of open test discrepancy reports (TDRs), and DISA Certifying Authority (CA) Recommendation for inclusion on the UC APL.

Testing was initially conducted at JITC's Global Information Grid Network Test Facility at Fort Huachuca, Arizona, from 1 July through 26 July 2013 using test procedures derived from Reference (d). Patches were applied and regression testing was conducted from 7 October through 27 November 2013.

Review of the vendor's LoC was completed on 31 January 2014. DISA adjudication of outstanding TDRs was completed on 21 January 2014. The DISA CA provided a positive recommendation based on security testing completed by DISA-led Information Assurance (IA) test teams and the results published in a separate report, Reference (e).

This DTR4 was requested to update the SUT from Release 8.4.2 to Release 8.6, which includes changes to both hardware and software for the Polycom Real Presence Collaboration Server (RMX) product line. Hardware updates include the addition of the entry-level Polycom RMX 1800 to the product line, as well as addition of new media blades MPMRx to the RMX 2000 and 4000 products. Software upgrade to RMX Release 8.6 applies to all the upgraded hardware, but does not apply to the RMX 1500, which continues with Release 8.4.2. Features added to Release 8.6 included:

- over-usage CPU detection
- Open Secure Shell (SSL) fixes
- Ultra Secure mode for RMX 1800 and RMX 2000, 4000 (with MPMRx blades)
- Hardware monitoring and reset for MPMRx media blades
- Cascading of conferences

This DTR also included an update the Real Presence DMA 7000 from Release 6.0.1J to 6.3. JITC reviewed the vendor's documentation and determined this release will have no impact on the certified interoperability features and functions.

Based on the review of the software and hardware updates requested in this DTR4, JITC determined IA and interoperability Verification & Validation (V&V) testing was required. The IA V&V test was conducted during the week of July 13-17, 2015 on products implemented with release 8.6 and on the DMA 7000 with release 6.3. The interoperability V&V testing was conducted from 20 through 24 July 2015 on the products that were configured with software release 8.6. There were no new interoperability discrepancies found during this V&V test. There were no discrepancies closed during this V&V test. The IA V&V testing was successful and results were published in a separate report, Reference (e).

JITC approves this DTR4 based on successful IA and interoperability V&V testing for this DTR4 and review of the vendor's documentation.

Additional Information. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Sensitive but Unclassified IP Data (formerly known as NIPRNet) e-mail. Interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/.gov users at https://stp.fhu.disa.mil/. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at https://jit.fhu.disa.mil/. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly from the Unified Capabilities Certification Office (UCCO), e-mail: disa.meade.ns.list.unified-

capabilities-certification-office@mail.mil. All associated information is available on the DISA UCCO website located at http://www.disa.mil/Services/Network-Services/UCCO.

Point of Contact (POC). The JITC point of contact is Mr. Dale Fulton, commercial telephone (520) 538-0507, DSN telephone 879-0507, FAX DSN 879-4347; e-mail address dale.h.fulton.civ@mail.mil; mailing address Joint Interoperability Test Command, ATTN: JTE (Mr. Dale Fulton) P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT is 1303702.

FOR THE COMMANDER:

Enclosure a/s

for RIC HARRISON
Chief
Networks/Communications and UC Portfolio

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the Polycom Real Presence Collaboration Server Family Software Release 8.1.4.J with the Distributed Media Application (DMA) 7000 Software Release 6.0.1J

Distribution (electronic mail):
DoD CIO
Joint Staff J-6, JCS
USD(AT&L)
ISG Secretariat, DISA, JTA
U.S. Strategic Command, J665
US Navy, OPNAV N2/N6FP12
US Army, DA-OSA, CIO/G-6 ASA(ALT), SAIS-IOQ
US Air Force, A3CNN/A6CNN
US Marine Corps, MARCORSYSCOM, SIAT, A&CE Division
US Coast Guard, CG-64
DISA/TEMC
DIA, Office of the Acquisition Executive
NSG Interoperability Assessment Team
DOT&E, Netcentric Systems and Naval Warfare
Medical Health Systems, JMIS IV&V
HQUSAISEC, AMSEL-IE-IS
UCCO

ADDITIONAL REFERENCES

(c) Joint Interoperability Test Command, Memo, JTE, "Joint Interoperability Certification of the Polycom Real Presence Collaboration Server Family Software Release 8.1.4.J with the Distributed Media Application (DMA) 7000 Software Release 6.0.1J," 6 February 2014
(d) Joint Interoperability Test Command, "Unified Capabilities Conference System (UCCS) Test Procedures for Unified Capabilities Requirements (UCR) 2013," Draft
(e) Joint Interoperability Test Command, "Information Assurance (IA) Findings Summary For Polycom RealPresence Collaboration Server (RMX) Family Release (Rel.) 8.1.4J (Tracking Number 1303702)," Draft